

In an information network having a complex structure made of a logical network and also a physical network, such an information network is constituted so as to realize a multicast service capable of not increasing an amount of a network traffic larger than a necessary traffic amount. This information network contains a plurality of information relay apparatuses for relaying information among a plurality of VLANs (Virtual Local Area Networks), a network for connecting these information replay apparatuses to each other, a multicast server and a plurality of terminals, belonging to an arbitrary VLAN of these VLANs. A multicast relay processing unit, a multicast address learning processing unit, and a multicast learning table are provided in each of these information relay apparatuses so as to register a predetermined relay destination of a multicast communication. Even in such a case that the VLAN structure is made complex irrespective of the physical network structure, it is possible to distribute such a multicast packet suitable for the physical network structure.